

AMENDMENTS TO THE DRAWINGS

Please amend the figures as shown in the enclosed replacement sheets. The attached sheet(s) of drawings include the change of the term "A/C converter" to "A/D converter."

REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-26 are pending in this application. Claims 1, 13, and 23-26 are independent. The remaining claims depend, directly or indirectly, from claim 1 or 13.

Claim Amendments

Independent claim 1 has been amended to explicitly recite the feature, “a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is stored in the one of an internal memory and a predetermined storage medium,” and “an image pickup conditions adjusting part for adjusting image pickup conditions based on the selected parameters by the parameter selecting part in one of an internal memory and a predetermined storage medium.” Independent claims 13 and 23-26 have been amended to explicitly recite the similar feature. No new subject matter has been added by way of these amendments, as support for these amendments may be found, for example, in paragraph [0135] of the publication of the Specification. Claims 1, 3-10, 13-26 have been amended to correct minor informalities as suggested by the Examiner.

Objection(s) to the Drawings

The Examiner has objected to the drawings for minor errors. Applicant has changed “A/C converter” to “A/D converter” as suggested by the Examiner, and Applicant has submitted replacement sheets with this Amendment. Accordingly, withdrawal of this objection is respectfully requested.

Objection(s) to the Specification

The Examiner has objected to the Specification because the Abstract exceeds 150 words and because of informalities. Applicant has amended the Specification in view of this objection. Also, the Examiner objected to the Specification for failing to include a Cross-Reference to Related Application section. In view of this objection, Applicant submits herewith an appropriate Application Data Sheet. Accordingly, withdrawal of this objection is respectfully requested.

Objection(s) to the Claims

Claims 1, 3-5, 7-8, 10, 13, 15-17, 19-20, and 22-26 are objected to because of informalities. Applicant has amended the claims as suggested by the Examiner. Accordingly, withdrawal of this objection is respectfully requested.

Claim Rejections under 35 U.S.C. § 101

Claims 23 and 24 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claims 23 and 24 have been amended as suggested by the Examiner. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 1-3, 5-9, 11-12, 23, and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by US Patent Publication No. 2002/0113862 to Center (hereinafter “Center”). Independent claims 1, and 23 and 25 have been amended as discussed above. To the extent that this rejection may still apply to the amended claims, the rejection is respectfully traversed for at least the reasons set forth below.

According to the MPEP § 2131, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Applicant respectfully asserts Center fails to show or suggest all of the limitations of the amended claims.

One or more embodiments of the present invention are directed to an image pickup device which sets conditions for picking up an image based on each attribute of person (*see, e.g.*, Publication of the Specification, column 1, paragraphs [0001] and [0012]). For example, parameters for correcting images are set in advance for a plurality of classes such as a race, an age and a sex. The suitable correction data are selected from these predetermined parameters (*see, e.g.*, Publication of the Specification, column 9, paragraph [0135]).

Accordingly, amended independent claim 1 requires, in part, “a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is stored in the one of an internal memory and a predetermined storage medium.”

In contrast, Center fails to show or suggest at least this limitation. In fact, Center merely discloses detecting a face based on a combination of results of template matching, motion detection, background difference, and color analysis of the image (*see* Center, column 2, paragraph [0026] and Figure 5).

Specifically, regarding the color analysis, Center discloses using a lookup table to determine the likelihood that each pixel in the current image is a color of human skin (*see* Center, column 4, paragraphs [0046]). Also, Center discloses that, “[t]he assumption is that colors near the color of the selected point are likely to also be skin” (*see* Center, column 4, paragraph [0047]). That is, Center uses color, not an attribute of a person, such as a race, an age, and a sex. Therefore, Center necessarily cannot have a table that includes optimized parameters based on attributes of a person.

Regarding a template matching, Center merely discloses that, “a number of templates may be used represent all of the variations in appearance of the object” (*see* Center, column 2, paragraph [0028]). That is, Center does not necessarily have the feature, “the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is stored in the one of an internal memory and a predetermined storage medium,” as required

by amended independent claim 1. Indeed, MPEP makes it clear that, “[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. . . . In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art” (*see* MPEP § 2112.)

Thus, Center does not show or suggest a table that includes optimized parameters based on attributes of a person, and, therefore, Center necessarily cannot select a set of parameters based on the attributes of a person. Accordingly, Center fails to show or suggest at least the feature, “a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is stored in the one of an internal memory and a predetermined storage medium,” as required by amended independent claim 1.

In view of above, Center fails to show or suggest the invention as recited in amended independent claim 1. Thus, independent claim 1 is patentable over Center. Further, in view of the similarity between the limitations of amended independent claims 13, 23 and 25 and the limitations discussed above with respect to amended independent claim 1, Applicant respectfully submits that the foregoing arguments as to the patentability of amended independent claim 1 also demonstrate the patentability of independent claims 23 and 25. As such, it is respectfully submitted that independent claims 23 and 25 are patentably distinguishable over the cited references at least for reasons analogous to those presented above. Dependent claims are

allowable for at least same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 13-15, 17-22, 24 and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Center in view of the article “Making saturated facial images useful again” (hereinafter “Soriano”). Independent claims 13, 24 and 26 have been amended as discussed above. To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed for at least the reasons set forth below.

To establish a *prima facie* case of obviousness under 35 U.S.C. § 103 (a), the Examiner must show that the prior art references, when combined, show or suggest all of the claim limitations (*see* MPEP § 2143). Applicant respectfully asserts that, whether considered separately or in combination, Center and Soriano do not show or suggest all of the limitations of the amended claims.

As explained above, one or more embodiments of the present invention are directed to an image pickup device which sets conditions for picking up an image based on each attribute of person (*see, e.g.*, Publication of the Specification, column 1, paragraphs [0001] and [0012]). For example, parameters for correcting images are set in advance for a plurality of classes such as a race, an age and a sex. The suitable correction data are selected from these predetermined parameters (*see, e.g.*, Publication of the Specification, column 9, paragraph [0135]).

Accordingly, independent claim 13 requires, in part, “a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is stored in the one of an internal memory and a predetermined storage medium.”

The Examiner admits that Center fails to show or suggest “a registration part” as required by claim 13. However, the Examiner alleges that it would have been obvious to one of ordinary skill in the art to modify Center’s device using Soriano’s teachings by including the information required for adjusting the pickup conditions to Center’s registration part in order to recover color information in facial images taken under non-ideal conditions, relying on Section 2.2 and 3.1 and Abstract of Soriano (*see* Office Action dated March 19, 2007, at pages 16-17).

However, Soriano fails to show or suggest at least the above limitation. In fact, Soriano merely teaches using color. Specifically, Soriano teaches the color recovery and color correction by RGB eigenfaces (*see* Soriano, Abstract and section 2.2). Also, Soriano teaches, “[w]e created a face database which contains color images of faces as well as information on the physics of color such as camera spectral response” (*see* Soriano, section 3.1). That is, Soriano uses color, not an attribute of a person, such as a race, an age, and a sex.

Thus, Soriano does not show or suggest a table that includes optimized parameters based on attributes of a person, and, therefore, Soriano necessarily cannot select a set of parameters based on the attributes of a person. Accordingly, Soriano necessarily cannot show or suggest at least the feature, “a parameter selecting part for selecting a set of parameters from a table based on the attributes of a person inferred by the inference part, wherein the table stores a plurality of sets of parameters that are respectively optimized based on each attribute of a person, and is

stored in the one of an internal memory and a predetermined storage medium,” as required by amended independent claim 13.

In addition, Center fails to show or suggest at least this feature for at least same reasons discussed with respect to amended claim 1 because of the similarities of the limitations of claim 1 and claim 13.

In view of above, Center and Soriano, whether taken separately or in combination, fail to show or suggest the invention as recited in amended independent claim 13. Thus, independent claim 13 is patentable over Center. Further, in view of the similarity between the limitations of amended independent claims 24, and 26 and the limitations discussed above with respect to amended independent claim 13, Applicant respectfully submits that the foregoing arguments as to the patentability of amended independent claim 13 also demonstrate the patentability of independent claims 24 and 26. As such, it is respectfully submitted that independent claims 24 and 26 are patentably distinguishable over the cited references at least for reasons analogous to those presented above. Dependent claims are allowable for at least same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Center as applied to claim 1 above. Claims 4 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Center as applied to claims 1 and 13, and further in view of European Patent Publication No. EP 1158786 (hereinafter “Aoki”).

Center and Soriano, as discussed above, do not show or suggest at least the above limitations of the claimed invention. Aoki, like Center and Soriano, do not show or suggest at

least the above limitations. Further, Aoki fails to show or suggest that which Center and Aoki lack. This is evidenced by the fact that Aoki are relied on as merely disclosing limitations showing the details such as a distance recognition part (*see, e.g.*, Office Action dated March 19, 2007, at pages 14-20).

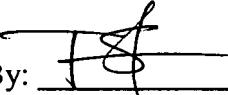
In view of the above, Center, Soriano and Aoki, whether considered separately or in combination, fail to show or suggest the present invention as claimed in independent claims 1, 13, and 23-26 of the present application. Thus, independent claims 1, 13, and 23-26 of the present application are patentable over Center, Soriano, and Aoki for at least the reasons set forth above. Dependent claims are allowable for at least the same reasons. Accordingly, withdrawal of these rejections is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591, Reference No. 15115/103001.

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Respectfully submitted,

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